October 6, 2014

Objection Reviewing Officer USDA Forest Service Northern Region P.O. Box 7669 Missoula, MT 59807

This letter is an objection, pursuant to 36 CFR section 218, to the Trapper Creek Vegetation Management Project Draft Decision Notice and Finding of No Significant Impact on behalf of the Alliance for the Wild Rockies, Native Ecosystems Council, and Montana Ecosystem Defense, collectively, "AWR.". The Responsible Official is Beaverhead-Deerlodge National Forest Ranger Russ Riebe, Ranger of the Wisdon/Wise River Ranger District . The Trapper Creek Project is planned for the Wise River Ranger Districts of the Beaverhead-Deerlodge National Forest.

NOTICE IS HEREBY GIVEN that AWR objects pursuant to 36 CFR section 218 to the Responsible Official's adoption of the Alternative 2 which includes five treatment types over 3,338 acres of national Forest System lands in the Trapper, Canyon, Cherry, Brownes and Rock Creek watersheds.

AWR is objecting to this project on the grounds that implementation of the Selected Alternative would not be fully in accordance with the laws governing management of the national forests such as the ESA, NEPA, NFMA, the Beaverhead-Deerlodge Revised Forest Plan and the APA, and will result in additional degradation in already degraded watersheds and mountain slopes, further upsetting the wildlife habitat, ecosystem and human communities. Our objections are detailed below.

As a result of the Draft DN, individuals and members of the above-mentioned groups would be directly and significantly affected by the logging and associated activities. Appellants are conservation organizations working to ensure protection of biological diversity and ecosystem integrity in the Wild Rockies bioregion (including the BDNF). The individuals and members use the project area for recreation and other forest related activities. The selected alternative would also further degrade the water quality, wildlife and fish habitat. These activities, if implemented, would adversely impact and irreparably harm the natural qualities of the Project Area, the surrounding area, and would further degrade the watersheds and wildlife habitat.

We did not receive the draft EA so we did not submit comments. The CEQ's implementing regulations, at 40 CFR section 1606.6 (b) require agencies to provide public notice of NEPA of the availability of environmental documents, more important they require agencies to mail thse who have requested it on an individual action. We requested that we be put on the mailing list in our 2010 scoping letter.

#### STATEMENT OF REASONS

The CEQ's require agencies to mail notice to those who have requested it on an individual action. We requested to be on the mailing list in our 2010 scoping comments, 40 CFR § 1606.6(b)(1). In large scale actions of national concern, agencies must notify organizations "reasonably expected to be interested in the

matter...." 40 CFR § 1606.6(b)(2). In the case of actions of primarily local concern, the notice may include notice to "community organizations." 40 CFR § 1606.6(3)(vi).

The Forest Service applies the concept of scoping set forth in the CEQ regulations, 40 CFR § 1501.7, regardless of whether the results are to be documented in an EIS, EA or CE. FSH 1909.15\_11. Scoping is meant to identify issues for analysis in the environmental review and requires the agency to "(1) Invite the participation of affected Federal, State, and local agencies, any affected Indian tribe, the proponent of the action, and other interested persons (including those who might not be in accord with the action on environmental grounds), unless there is a limited exception under §1507.3(c)." 40 CFR § 1501.7(a)(1) (emphasis added). The Forest Service's NEPA regulations provide that scoping is required for all proposed actions, including those that would appear to be categorically excluded from documentation in an EA or EIS. 36 CFR § 220.4(e)(2). The SOPA may not be used as the sole scoping mechanism for a proposed action. 36 CFR § 220.4(e)(3).

The Forest Service's predecisional review regulations provide that proposed projects are not subject to objection when no timely, specific written comments regarding the proposed project are received during the period for public comment. 36 CFR § 218.4. "Individuals and entities . . . who have submitted timely, specific written comments regarding a proposed project or activity . . . during any designated opportunity for public comment may file an objection." 36 CFR § 218.5(a). Opportunity for comment on an EA includes "during scoping or any other instance where the responsible official seeks written comments." 36 CFR § 218.5. Issues raised in an objection "must be based on previously submitted specific written comments regarding the proposed project or activity and attributed to the objector, unless the issue is based on new information that arose after the opportunities for comment." 36 CFR § 218.8(c).

36 CFR § 218.5 provides that "opportunity for comment" for the purposes of objection includes during scoping. It does not require that an objecting party comment both during scoping and during other opportunities to comment: The regulations provide that opportunity for comment includes "during scoping or any other instance where the responsible official seeks written comments." 36 CFR § 218.5 (emphasis added). Here, since AWR and NEC commented during the 2010 scoping, and no additional scoping was conducted, those scoping comments are sufficient to make them eligible to object to the 2014 proposed decision. If that is the case, 36 CFR § 218.8(c) provides that issues raised in an objection must be limited to those raised in previously submitted written comments unless the issue is based on new information that arose after opportunities for comment. Because AWR and NEC never received the draft EA for Trapper, and therefore had no opportunity for comment, thus AWR and NEC should be allowed to object and should raise both issues raised in their scoping comments and any other issues arising from the 2014 EA.

Moreover, the Forest Service NEPA regulations, and the Forest Service Handbook, require scoping in a broad range of circumstances. Although the CEQ NEPA regulations regarding scoping, 40 CFR § 1501.7, only apply in the context of an EIS, the Forest Service requires scoping regardless of whether the end result is an EIS, an EA or a CE. 36 CFR § 220.4(e)(2). The scoping set forth in the CEQ regulations, which the Forest Service purports to adopt, requires the action agency to "(1) Invite the participation of affected Federal, State, and local agencies, any affected Indian tribe, the proponent of the action, and other interested persons (including those who might not be in accord with the action on environmental grounds) . . . . " 40 CFR § 1501.7(a)(1). Since the Forest Service did not conduct scoping for the 2014 EA, and did not invite AWR and NEC to participate in that scoping, the Forest Service appears to have violated its own regulations. Alternatively, if the 2014 EA is intended to incorporate the scoping conducted in 2010, AWR and NEC's comments during that scoping should be sufficient to make us eligible to object.

The Forest Service should conduct scoping for the 2014 Trapper project and/or reissue the Draft EA since the draft EA was not mailed to us and it is a violation of NEPA to not scope on the 2014 version of Trapper Creek.

I THE FOREST SERVICE MUST PREPARE A FULL ENVIRONMENTAL IMPACT STATEMENT FOR THE Trapper Creek Project.

# I raised this issue in my last appeal of the Trapper Creek Project. I wrote the following.

All federal agencies prepare an environmental impact statement for significant actions that affect the environment. 42 U.S.C. 4332(2)(C). The implementing regulations for NEPA are binding upon the Forest Service. Southern Oregon Citizens against Toxic Sprays, Inc. v. Clark, 720 F.2d 1475, 1478 (9th Cir. 1983); see also Citizens for Better Forestry v. U.S. Dept. of Agriculture, 341 F.3d 961, 970-71 (9th Cir. 2003). Under the regulations, an action is significant if it violated a federal law imposed for the protection of the environment. 40 C.F.R. 1508.27 (10). In its October 30, 2008 Order, the United States District Court for the District of Montana, Missoula Division, ruled that the Forest Service violated the federal National Forest Management Act (NFMA) by violating the Beaverhead-Deerlodge revised National Forest Land & Resource Management Plan (Beaverhead-Deerlodge revised Forest Plan). Thus, because the Forest Service violated a federal environmental law, this Project is a significant action. 40 C.F.R. 1508.27 (10). In light of its significance, any future version of this timber sale project must be thoroughly analyzed in a full Environmental Impact Statement (EIS). The Forest Service's initial supplemental analysis for the Trapper Creek Project fails this legal requirement because it is presented as a supplemental Environmental Assessment, instead of an Environmental Impact Statement. The DN and FONSI are in violation of NFMA, NEPA, and the APA.

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# SOIL PRODUCTIVITY

The EA's soil section fails to disclose in adequately how soil productivity will be affected by this proposed timber sale.

The EA does not consider detrimental soil disturbance from livestock grazing or off-road vehicle use.

The Sheep Creek FEIS, which was a similar sale in 2005, begins the soil section with two sentences that strongly indicates the FS's chosen course of action proposed is ill-advised: "Soil is the backbone of ecosystem integrity yet remains difficult to quantify when assessing impacts of human and natural disturbance. A general lack of long-term data on management and difficulty in obtaining true reference conditions complicate interpretations." (FEIS at 165.) Shortly thereafter, "Therefore, assessments on management impacts rely on theoretical assumptions for preserving soil as a life source." (Id.) Unfortunately, in terms of soil the FS then proceeds on a course of action perhaps best described as "damage now, monitor and experiment with unproven mitigation measures later."

The proposal to cut trees and burn in areas of low soil productivity due to past grazing activities and ongoing grazing and ATV use flies in the face of NFMA's requirements to assure regeneration, sustained yield, and maintain soil productivity. Sec. 6. of the National Forest Management Act states:

- (g) As soon as practicable, but not later than two years after enactment of this subsection, the Secretary shall in accordance with the procedures set forth in section 553 of title 5, United States Code, promulgate regulations, under the principles of the Multiple-Use, Sustained-Yield Act of 1960, that set out the process for the development and revision of the land management plans, and the guidelines and standards prescribed by this subsection. The regulations shall include, but not be limited to-
- (3) specifying guidelines for land management plans developed to achieve the goals of the Program which-
- (E) insure that timber will be harvested from National Forest System lands only where-
- (i) soil, slope, or other watershed conditions will not be irreversibly damaged;

NFMA regulations at 36 C.F.R. § 219.27 (Management requirements) state:

- (a) Resource protection. All management prescriptions shall--
- (1) Conserve soil and water resources and not allow significant or permanent impairment of the productivity of the land;
- (b) *Vegetative manipulation*. Management prescriptions that involve vegetative manipulation of tree cover for any purpose shall--
- (5) Avoid permanent impairment of site productivity and ensure conservation of soil and water resources:

The principles of sustained yield of timber are also not served in the case where the FS does not know how losses in land productivity will lead to reductions in timber yield over second and later rotations.

In order to comply with NFMA, its implementing regulations, and Forest Plan Standards, the Northern Region adopted Soil Quality Standards (FSM 2500-99-1). Therein the standards read:

Policy. Design new activities that do not create detrimental soil conditions on more than 15 percent of an activity area. In areas where less than 15 percent detrimental soil conditions exist from prior activities, the cumulative detrimental effect of the current activity following project implementation and restoration must not exceed 15 percent. In areas where more than 15 percent detrimental soil conditions exist from prior activities, the cumulative detrimental effects from project implementation and restoration should not exceed the conditions prior to the planned activity and should move toward a net improvement in soil quality.

It is clear that the intent of the Soil Quality Standards is that the FS must, in each case, consider the cumulative effects of both past and proposed soil disturbances to assure the desired soil conditions are met. This includes impacts from activities that include logging, firewood gathering, livestock grazing, and motorized recreation impacts, for under Definitions the Standards state:

Activity Area. A land area affected by a management activity to which soil quality standards are applied. Activity areas must be feasible to monitor and include harvest units within timber sale areas, prescribed burn areas, grazing areas or pastures within range allotments, riparian areas, recreation areas, and alpine areas. All

temporary roads, skid trails, and landings are considered to be part of an activity area.

Further down at FSM 2554.1, the Soil Quality Standards state:

1. Detrimental Soil Disturbance. These disturbances include the effects of compaction, displacement, rutting, severe burning, surface erosion, loss of surface organic matter, and soil mass movement. At least 85 percent of an activity area must have soil that is in satisfactory condition. Detrimental conditions include:

Compaction. Detrimental compaction is a 15 percent increase in natural bulk density. The cumulative effects of multiple site entries on compaction should also be considered since compacted soils often recover slowly.

Rutting. Wheel ruts at least 2 inches deep in wet soils are detrimental.

Displacement. Detrimental displacement is the removal of 1 or more inches (depth) of any surface soil horizon, usually the A horizon, from a continuous area greater than 100 square feet.

Severely-burned Soil. Physical and biological changes to soil resulting from high-intensity burns of long duration are detrimental. This standard is used when evaluating prescribed fire. Guidelines for assessing burn intensity are contained in the Burned-Area Emergency Rehabilitation Handbook (FSH 2509.13).

Surface Erosion. Rills, gullies, pedestals, and soil deposition are all indicators of detrimental surface erosion. Minimum amounts of ground cover necessary to keep soil loss to within tolerable limits (generally less than 1 to 2 tons per acres per year) should be established locally depending on site characteristics.

Soil Mass Movement. Any soil mass movement caused by management activities is detrimental.

- 3. Monitoring Methods. Visual methods are generally used to make initial evaluations of the effects of management activities on soils. The major objective of soil quality monitoring is to ensure that ecologically sustainable soil management practices are being applied. In most cases, qualitative estimates will be considered sufficient. The use of photo points provides good documentation and is recommended. Measurements and detailed sampling are used to calibrate visual methods and to conduct investigations where visual methods are inadequate or where benchmark or statistically valid sampling is required.
- a. Areal Extent Sampling. Estimates of the percent of an activity area affected by detrimental soil disturbance can be made visually or by transecting. If statistically valid techniques are needed for benchmark sites, determine sample size and transect design using procedures described in Howes, Hazard, and Geist 1983.
- b. Soil Sampling Techniques. Soil displacement, rutting, severely burned soil, erosion, mass movement, and above-ground organic matter can be observed and measured. (Emphasis added.)

It should be noted that the FS assumes that maintaining soil productivity is achieved simply by limiting detrimental disturbance to no more than 15% of an Activity Area ("treatment" unit). Unfortunately, the scientific adequacy of the FS's methodology for maintaining soil productivity on the BNF has never been demonstrated. The FS's determination that it may permanently

damage the soil on 15% of an activity area and still meet NMFA and planning regulations is arbitrary. The EA does not cite any scientific basis for adopting the 15% numerical limit.

Even considering their limitations, the Regional Soil Standards are clear—the BDNF must measure the amount of detrimentally disturbed soils from past or ongoing logging, grazing, offroad vehicle use, etc. in logically bounded Activity Areas—especially if the soil in those disturbed sites would be further disturbed by proposed project activities.

This is another reason a full environmental impact statement is needed since the DN and FONSI violate NFMA and NEPA.

The EA also does not disclose the locations and acreages of burning areas, which is important because of the extreme amount of soil and other disturbance that occurs on these sites—they will be essentially industrialized for the long-term, despite "mitigation." Also, these impacted areas must be part of the calculation of detrimentally disturbed acreages, as per the Soil Quality Standards, which the EA neglects to do.

The implications for the likely differing amounts of detrimental disturbance increases based on the variability in erosion susceptibility across the different log units are not considered in the EA.

The FS is avoiding the entire issue of maintaining soil productivity. As indicated in the EA, in FSM 2500-99-1 and in FSH 2509.18, the FS assumes that maintaining soil productivity is achieved by limiting detrimental disturbance to no more than 15% of an activity area (cutting unit) and by maintaining that same 15% limit at the 6<sup>th</sup> code HUC watershed level. Unfortunately, the scientific adequacy of the FS's methodology for maintaining soil productivity on has never been demonstrated. The FS's determination that it may permanently damage the soil on up to 15% of an activity area and up to 15% of each 6<sup>th</sup> code HUC watershed, and still meet NMFA and planning regulations is arbitrary. Neither the EA, the Forest Plan, nor the FSM 2500-99-1 cite adequate scientific basis for adopting 15% as a numerical limit—it is simply arbitrary.

The FS has essentially admitted that it is in the dark as far as doing scientific research on soil productivity changes following management activities. In response to comments on the Black Ant Salvage DEIS, Lewis & Clark NF, and the FS states:

Soil Quality Standards "provide benchmark values that indicate when changes in soil properties and soil conditions would result in significant change or impairment of soil quality based on available research and Regional experience" (Forest Service Manual 2500, Region 1 Supplement 2500-99-1, Chapter 2550 – Soil Management, Section 2554.1).

A formal research study, the "Long Term Soil Productivity Study," is currently being conducted by the Research Branch of U.S. Department of Agriculture, Forest Service to validate these soil quality standards.

(USDA Forest Service, 2002a.)

The EA presents a new, discretionary limitation on cumulative loss in soil productivity within a 6<sup>th</sup> code HUC watershed (beyond and including the activity areas). This is the FS's pretense of accounting for those areas its management has caused excessive detrimental disturbance. However, we note that the cumulative total nears the arbitrary 15% limit. One could effectively argue that the FS cannot log much more of this watershed in the future, until many decades later when soil productivity has been genuinely restored. We can hear the howls of the timber interests already, pointing out that the Forest Plan sets no such limits and indeed, we can rest assured that the discretionary nature of this arbitrary limit means it will be immediately abandoned by the FS the second it proposes a timber sale in an area where the watershed limit would be exceeded.

Application of Regional Soil Quality Standards for soil productivity conservation requires direct, on-the-ground surveys in areas affected by previous management activities in order to provide numerical percentages of existing detrimentally disturbed activity areas. The EA states, "Sampling did not cover known previously harvested areas." (EA at 166.) The FS prefers that they, and the public, remain in the dark as to the actual extent of cumulative soil damage and losses of soil productivity due to their past management actions.

Alexander and Poff (1985) reviewed literature and found that as much as 10% to 40% of a logged area can be disturbed by skyline logging. They state:

There are many more data on ground disturbance in logging, but these are enough to indicate the wide diversity of results obtained with different equipment operators, and logging techniques in timber stands of different composition in different types of terrain with different soils. Added to all these variables are different methods of investigating and reporting disturbance.

Alexander and Poff (1985) also note that livestock grazing and other activities such as ORVs and motorcycles cause significant soil compaction. The EA at p. 172 states, "Disturbance from recreation and grazing occurs in the project area though the impacts are unclear." Perhaps knowledge of the impacts would at least approach clarity if the proper studies had been undertaken.

Adams and Froehlich (1981) provide reasons why impacts **beyond** the directly compacted 15% of an area must be considered in any reasonable definition of soil productivity:

Since tree roots extend not only in depth but also in area, the potential for growth impact also becomes greater as compaction affects more of the rooting area. In a thinned stand, for example, you can expect the greatest growth impacts in residual trees that closely border major skid trails or that have been subject to traffic on more than one side of the stem."

For a study done on the Kootenai and Flathead National Forests, soil scientists measured soil bulk densities, macropore porosities, and infiltration rates using paired observations of disturbed vs. undisturbed soils. They discovered that although "the most significant increase in compaction occurred at a depth of 4 inches... some sites showed that maximum compaction occurred at a depth of 8 inches... (and) Furthermore, ... subsurface compaction occurred in glacial deposits to

a depth of at least 16 inches." (Kuennen, Edson, and Tolle, 1979.) The FS does not have enough soil bulk density and other compaction monitoring data collected at the adequate soil depths and in enough sites on the BNF to be able to make accurate predictions about the effects of soil compaction in Project activity areas.

Following a study by Cullen et al., (1991) which was carried out on the Kootenai NF and the Flathead NF, the authors concluded: "This result lends support to the general observation that most compaction occurs during the first and second passage of equipment." And Page-Dumroese (1993), in a Forest Service research report investigating logging impacts on volcanic ashinfluenced soil in the Idaho Panhandle NF, states, "Moderate compaction was achieved by driving a Grappler log carrier over the plots twice." She also cited other studies that indicated: "Large increases in bulk density have been reported to a depth of about 5 cm with the first vehicle pass over the soil." Williamson and Neilsen (2000) assessed change in soil bulk density with number of passes and found 62% of the compaction to the surface 10cm to come with the first pass of a logging machine. In fine textured soils Brais and Camire (1997) demonstrated that the first pass creates 80 percent of the total disturbance to the site.

Adams and Froehlich (1981) state, "Unfortunately, little research has yet been done to compare the compaction and related impacts caused by low-pressure and by conventional logging vehicles."

The Northern Region recognizes that soil quality standards must be validated. FSM 2500-99-1 requires that Forest Supervisors must:

- Assess ... whether (soil quality standards) are effective in maintaining or improving soil quality;
- Evaluate the effectiveness of soil quality standards and recommend adjustments to the Regional Forester; and
- Consult with soil scientists to evaluate the need to adjust management practices or apply rehabilitation measures.

This all implies that monitoring must be undertaken. Furthermore, FSM 2500-99-1 recognizes that soil productivity is defined not merely in terms of the absence of meeting the 15% standard. "Soil Function" is defined thus:

Primary soil functions are: (1) the sustenance of biological activity, diversity, and productivity, (2) soil hydrologic function, (3) filtering, buffering, immobilizing, and detoxifying organic and inorganic materials, and (4) storing and cycling nutrients and other materials.

And "Soil Quality" is defined as "The capacity of a specific soil to function within its surroundings, support plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation."

Neither soil function nor soil quality, as FSM 2500-99-1 defines it, have ever been monitored on the BNF following management activities.

The Forest Management Handbook at FSH 2509.18 directs the FS to do validation monitoring to "Determine if coefficients, S&Gs, and requirements meet regulations, goals and policy" (2.1 – Exhibit 01). It asks what we are asking: "Are the threshold levels for soil compaction adequate for maintaining soil productivity? Is allowing 15% of an area to be impaired appropriate to meet planning goals?" The Ecology Center asked the Northern Region if they have ever performed this validation monitoring of its 15% Standard, in their February 26, 2002 Freedom of Information Act request to the Regional Forester, requesting:

The Forest Management Handbook at FSH 2509.18 provides the Forest Service with examples of validation monitoring to "Determine if coefficients, S&Gs, and requirements meet regulations, goals and policy." It asks "Are the threshold levels for soil compaction adequate for maintaining soil productivity? Is allowing 15% of an area to be impaired appropriate to meet planning goals?" We request all documentation of validation monitoring by the Forest Service in the Northern Region that answers those two questions.

The Regional Office's reply letter stated that there is no documentation that responds to this request.

FSM 2500-99-1 superceded similar directives issued in 1994 (FSH 2509.18). And as far back as 1988, shortly after the BNF adopted its Forest Plan, a similar directive recognized the need for monitoring to insure that soil productivity would be maintained. (See R1/R4 SOIL AND WATER CONSERVATION PRACTICES HANDBOOK, Forest Service Handbook 2509.22, May 1900.) Each of these Regional directives required implementation and effectiveness monitoring. But as the Regional Office's reply to the Ecology Center FOIA indicates, the EA is unable to cite the results of any monitoring, to provide a basis for assuming the Standards actually protect **soil productivity**.

Page-Dumroese et al. 2000 (an earlier version of which is cited in FSM 2500-99-1) emphasize the importance of validating soil quality standards using the results of monitoring:

Research information from short- or long-term research studies supporting the applicability of disturbance criteria is often lacking, or is available from a limited number of sites which have relative narrow climatic and soil ranges.

...Application of selected USDA Forest Service standards indicate that blanket threshold variables applied over disparate soils do not adequately account for nutrient distribution within the profile or forest floor depth. These types of guidelines should be continually refined to reflect pre-disturbance conditions and site-specific information. (Abstract.)

Soil productivity can only be protected if it turns out that the soil Standards work. To determine if they work, the FS would have to undertake objective, scientifically sound measurements of what the soil produces (grows) following management activities. But the FS has never done this on the BNF.

Also, the mitigation measures, such as operating ground-based equipment when soil moisture is low is so vague as to protect nothing, Also, the EA fails to cite the results of monitoring that

prove the frozen soil or deep snow mitigation measures are effective in protecting soil properties and maintaining soil productivity.

It is reasonable to expect that in order for the FS to assure that soil productivity is not or has not been significantly impaired, to assure that the forest is producing a sustained yield of timber, for one example, tree growth must not be significantly reduced by soil-disturbing management activities. Grier et al., (1989), in a FS General Technical Report, adopted as a measure of soil productivity: "the total amount of plant material produced by a forest per unit area per year." (P. 1.) And they cite a study finding "a 43-percent reduction in seedling height growth in the Pacific Northwest on primary skid trails relative to uncompacted areas" for example. And in another FS report, Adams and Froehlich (1981) state:

Measurements of reduced tree and seedling growth on compacted soils show that significant impacts can and do occur. Seedling height growth has been most often studied, with reported growth reductions on compacted soils from throughout the U.S. ranging from about 5 to 50 per cent.

The EA does not consider that areas burned such that the areas having less available nitrogen, potassium, calcium, magnesium or other nutrients because of the effects of fire fall under the definition of "detrimentally burned" (as per FSM R1 Supplement 2500-99-1).

The EA does not consider that areas burned such that they would be void or very much depleted of soil fungi and bacteria fall under the definition of "detrimentally burned" (as per FSM R1 Supplement 2500-99-1).

The chemical and biological make-up of the specific soils in the project area, and their ability to withstand fire and detrimental disturbance that lowers soil productivity is not a subject adequately taken up by the FS. Harvey et al., 1994 state:

The ...descriptions of microbial structures and processes suggest that they are likely to provide highly critical conduits for the input and movement of materials within soil and between the soil and the plant. Nitrogen and carbon have been mentioned and are probably the most important. Although the movement and cycling of many others are mediated by microbes, sulfur phosphorus, and iron compounds are important examples.

The relation between forest soil microbes and N is striking. Virtually all N in eastside forest ecosystems is biologically fixed by microbes... Most forests, particularly in the inland West, are likely to be limited at some time during their development by supplies of plant-available N. Thus, to manage forest growth, we must manage the microbes that add most of the N and that make N available for subsequent plant uptake.

(Internal citations omitted.)

Another big problem is that the EA largely relies on the FS's track record of relying upon Best Management Practices (BMPs) to base its claims that soil productivity will be maintained following logging practices. However, BMP monitoring does not attempt to measure post-project soil productivity, since the audits are not scientifically designed to do so. Also, BMP monitoring

does not measure post-project detrimental disturbance percentages in project activity areas. The project must have a unit by unit determination with empirical evidence that the Forest Service is complying with the soil standards. We ask that the Forest Service please disclose the following information about soils:

- A. Disclose the amount of detrimental soil disturbance that currently exists in each proposed unit from previous logging and grazing activities;
- B. Disclose the expected amount of detrimental soil disturbance in each unit after ground disturbance and prior to any proposed mitigation/remediation;
- C. Disclose the expected amount of detrimental soil disturbance in each unit after proposed mitigation/remediation;
- D. Disclose the analytical data that supports proposed soil mitigation/remediation measures;
- E. Disclose the timeline for implementation;

### ROADLESS ANALYSIS IS INADEQUATE

The DDN says the area "has low to moderate overall capability to provide wilderness values," seven IRAs overlap some portion of the project area. These areas will be designated wilderness under the Northern Rockies Ecosystem Protection Act which has been introduced in every Congress session since 1992 and currently is before Congress as H.R. 1187. The EA pretends there is some biological or other tangible difference between uninventoried roadless areas ("unroaded areas") and Inventoried Roadless Areas (IRAs), yet fails to disclose just what those real, tangible differences are. In fact, there are none. Previous roadless inventories, both RARE II and during preparation of the Beaverhead Forest Plan, omitted unroaded areas adjacent to the IRAs. The EA discusses unroaded areas, yet there are no maps showing the location of such areas—the boundaries of these areas. With the controversy—both social and scientific—surrounding the roadless issue, the failure to disclose with a map in an EIS all inventoried and uninventoried roadless lands makes no sense and constitutes a violation of NEPA.

The idea of doing separate analyses for the vaguely defined "unroaded" areas and contiguous or noncontiguous inventoried roadless lands make no sense. Since the existing inventoried roadless area boundaries were often adopted arbitrarily, analyzing effects on wilderness characteristics of all roadless acres—whether inventoried, uninventoried, uninventoried contiguous with inventoried, or any combination—is clearly called for in this analysis. Again, with all the controversy surrounding the roadless issue, to analyze impacts on uninventoried roadless lands separate from inventoried roadless areas is completely illogical and constitutes a violation of NEPA.

Nothing is discussed as far as the possibility that the uninventoried roadless areas may be eligible for later inclusion as inventoried roadless under the upcoming Revised Forest Plan or as eligible for Wilderness designation.

The proposing activities in roadless areas of any status may irretrievably alter their wilderness characteristics. It is at this time, when an EIS is prepared to discuss the issue of potential impacts on roadless, that such analyses should have taken place. The American public, in the context of

commenting on the Roadless Rule proposal, has clearly spoken against adverse impacts on roadless areas.

It is well established that logging in an uninventoried area is an "irreversible and irretrievable" commitment of resources that "could have serious environmental consequences" *Smith v. U.S. Forest Service*, 33 F.3d 1072, 1078 (9<sup>th</sup> Cir. 1994). The EA failed to address the effects of logging and roading the uninventoried roadless areas on their characteristics vis-à-vis potential for future wilderness or inventoried roadless area designation. The discussion of the impacts on unroaded areas was superficial. There was no analysis of the project's impact on the unique values of unroaded areas together with their adjacent inventoried roadless areas. The EA does not constitute the "hard look" requirement with respect to the environmental impact of logging and roading uninventoried roadless areas. Cutting and burning trees in uninventoried roadless areas requires a full Environmental Impact Statement.

The EA's failure to take the requisite "hard look" at the IRA boundaries means that it failed to discuss whatever the landscape features were that the FS chose to consider for originally limiting the IRAs. Page 237 of the EA states: "6. created a one third of a mile buffer from the center line of existing roads to provide an area of influence that is no longer being affected by road noise, dust, human encounters etc." However this was not done for the 5 miles of new roads and 1137 acres of clearcuts.

Riggers, et al. 1998 provides a good discussion on the comparison of stream and water quality conditions in roadless areas vs. roaded, developed areas on the adjacent Lolo National Forest. It is likely that the roaded streams on the BNF would show any less contrast with unroaded streams as for the Lolo NF.

The EA failed to analyze an action alternative that maintains the wilderness values of all inventoried roadless and uninventoried roadless lands in the project area and preserve the option for Congress to designate Wilderness in this area before any more activities degrading the wilderness values are allowed.

The EA does not include an alternative that would not affect all currently unroaded areas contiguous with inventoried roadless and Wilderness, despite the fact that their omission from inventoried roadless was arbitrary, and the science that indicates such areas are the highest ecological integrity across the Northern Rockies.

Since the EA failed, as required, to incorporate the Roads Analysis Process and disclose the locations of all motorized travelways in the project area, it is impossible for the decision maker and public to tell which of the areas to be logged fall within logically bound roadless areas (not just "inventoried" roadless areas).

Biologically, speaking, the arbitrary "inventoried" roadless areas boundaries are irrelevant. The EA failed to analyze significant resources the FS has repeatedly acknowledged are associated with unroaded areas. In addition it does not disclose the irreversible and irretrievable

commitment of resources caused by logging activities in these areas, particularly unroaded areas contiguous to "inventoried" roadless areas.

Federal Register: October 19, 1999 (Volume 64, Number 201)] [Notices] [Page 56306-56307]

Notice of Intent to prepare an EIS

"This proposed rulemaking responds to strong public sentiment for protecting roadless areas and the clean water, biological diversity, wildlife habitat, forest health, dispersed recreational opportunities and other public benefits they provide."

"... establishing criteria and procedures to ensure that the social and ecological values, that make both inventoried roadless areas and other uninventoried roadless lands important, are considered and protected through the forest planning process"

"It would also guide land managers in determining what activities are appropriate in uninventoried roadless areas that have important ecological and social values."

"National procedures and criteria that address how land managers at the forest plan level should manage uninventoried roadless areas so as to protect their unroaded characteristics and benefits"

[Federal Register: May 10, 2000 (Volume 65, Number 91)] [Proposed Rules] [Page 30275-30288] Notice of Roadless Area Conservation Proposed Rule

The intent of this rulemaking is to provide lasting protection in the context of multiple-use management for inventoried roadless areas and other unroaded areas within the National Forest System

Soil, water, and air. These three key resources are the foundation upon which other resource values and outputs depend. Healthy watersheds provide clean water for domestic, agricultural, and industrial uses; help maintain abundant and healthy fish and wildlife populations; and are the basis for many forms of outdoor recreation.

Healthy watersheds provide a steady flow of high quality water, maintain an adequate supply of water, and reduce flooding. Managing land uses to keep watersheds properly functioning and in natural balance is critical to maintaining watershed health and productivity.

Roadless areas generally have attributes that promote watershed health, primarily because minimal ground-disturbing activities have occurred.

Ground disturbing activities can accelerate erosion, increase sediment yields, and disrupt normal flow processes. Roadless areas maintain healthy and productive

soils, which promote water entry into aquifers, minimize accelerated runoff, and provide for a diverse and abundant plant community important to both human and animal health. Roadless areas are less likely to suffer from human-caused landslides and other soil movement that fill streams with sediment and debris and disrupt normal stream processes. Roadless areas also have less dust and vehicle emissions, which reduce air quality, elevate human health risks, and diminish water quality. Roadless areas help maintain the high quality visibility that forest users seek when visiting the national forests.

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Unroaded areas are more likely than roaded areas to support greater ecosystem health, including the diversity of native and desired non-native plant and animal communities, due to the absence of disturbances caused by roads and accompanying activities. Healthy ecosystems can be characterized by the degree to which ecological factors and their interactions are reasonably complete and functioning for continued resilience, productivity, and renewal of the ecosystem. Native plant and animal communities tend to be more intact in these less disturbed areas. Roadless areas also conserve native biodiversity, by providing a buffer against the spread of invasive species.

Conserving biodiversity offers many benefits to society. The public has recognized the importance of protecting species and ecosystems for their utilitarian, subsistence, and intrinsic values. Important benefits provided by healthy ecosystems, with diverse organisms and intact natural processes, include: (1) conservation of air, water, and soil quality and (2) sustainable levels of goods and services, including viable and desired levels of both game and non-game species. In addition to these important reasons for maintaining healthy ecosystems with a full component of biodiversity, many species are valuable for medicinal and agricultural purposes.

Protecting and maintaining biodiversity also provides the opportunity for the appreciation and enjoyment of natural beauty and gives future generations the chance to experience wild places, with their unique living plant and animal communities.

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The Forest Service manages environmental settings to provide, among other things, opportunities for recreational experiences. The Recreation Opportunity Spectrum (ROS Users Guide, FSM 2311 and FSH 2309.27) was developed to provide a framework for classifying and defining segments of outdoor recreational environments, potential activities, and experiential opportunities.

The Recreation Opportunity Spectrum's settings, activities, and opportunities represent a continuum that is divided into six classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban. Inventoried

roadless and other unroaded areas are characterized mainly by the primitive, semiprimitive non-motorized, and semi-primitive motorized classes.

Primitive and semi-primitive non-motorized classes often have many wilderness attributes; however, unlike wilderness, the use of mountain bikes and other mechanized means of travel, such as those used by people with disabilities, can be permitted. In addition, these classes have fewer restrictions on motorized tools, search and rescue operations, and aircraft use than in wilderness areas. In semi-primitive motorized settings, there is little evidence of managerial control, yet these areas allow some motorized activities, such as: off-highway vehicle, oversnow vehicle, motorboat, and helicopter use; chainsaw and other motorized tool use; and appropriate motor vehicle use for other resource management activities. In addition, persons with disabilities have enhanced access capability in semi-primitive motorized class areas.

Inventoried roadless and other unroaded areas may provide outstanding opportunities for other dispersed recreational activities, such as hiking, fishing, camping, hunting, picnicking, wildlife viewing, cross-country skiing, and canoeing. All of these activities and those mentioned for the semi-primitive motorized class may occur in areas on the developed end of the spectrum, but the experience is different. Roaded natural, rural, and urban classes are characterized by increased interactions with other people, more sights and sounds of human development and activity, more management restrictions and controls, and more landscape modification resulting from resource management activities.

Inventoried roadless and other unroaded areas are the last remaining relatively undisturbed landscapes outside of wilderness and similarly designated areas. The demand for motorized and non-motorized recreation opportunities is increasing. As these lands continue to be developed, the supply of unroaded lands that are available for dispersed recreation is reduced.

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The Forest Service believes that it is important to protect the roadless characteristics of unroaded areas within the context of its multiple-use mandate.

Contiguous unroaded lands can be critically important linkage between roadless and/or Wilderness areas, are often at lower elevations and therefore provide unique roadless values based on differences in vegetation and habitat, proximity to mainstem rivers and larger streams and accessibility to primitive and semi-primitive recreation to the public. The EA failed to recognize or analyze the role of these lands and to analyze them, despite the continued recognition of their unique status and qualities. This is a failure to analyze a significant resource under Section 102(C) of the National Environmental Policy Act. As a result it also violates the public participation requirements of NFMA. In addition, logging in these lands is an irreversible commitment of resources, requiring full NEPA analysis of the values potentially affected by logging: soils, watershed and native fisheries, natural plant communities invasion, outdoor recreation, wildlife habitat, and wilderness value.

Contiguous unroaded lands (those contiguous with inventoried roadless areas) have been recognized for their unique ecological potential by the USFS. Recently, the current administration noted in its Interim Directive on the Roads Policy, issued December 14, 2001:

Additionally, the revision of Forest Service Manual Chapter 7710 included interim requirements that, rather than addressing the transportation atlas, record, or analysis, imposed a significant restriction on road construction or reconstruction in inventoried roadless areas and contiguous unroaded areas until a forest-scale roads analysis was completed and incorporated into the Forest plan. (66 FR 65796.)

Thus, the first set of Forest Service Manual provisions accompanying the roads policy acknowledged the special importance of these lands for protection of roadless values. In addition, the agency continued to recognize their importance and link them to IRA's in terms of shared values:

.... remains consistent with the agency's intent in adopting the final road management directive in January 2001. As explained in the January Federal Register notice, the agency retained the transition procedures of the proposed policy (renamed "interim requirements" in the final directive) to ensure that the "values associated with inventoried roadless and contiguous unroaded areas are fully considered within the context of forest planning" (66 FR 3226, Col. 3). (66 FR 65798)

Logging of the undeveloped tracts of land contiguous to inventoried roadless areas or Wilderness requires full analysis of the wilderness, recreational and other values of the areas. The EA fails to do this. Hence, the FS makes the untenable decision to defer the decision of what to do with these areas until after they have modified them. The impacts of this irreversible action occur now, not some unspecified time in the future, and must be completely reviewed before irreversible action is taken. Logging in these unroaded areas will change their nature and reduce and modify many of the watershed values they may now serve. The reliance on management unit designations in Forest Plans that have now expired under the 15-year term under NFMA (16 USC § 1604(f) (5) "Plans... shall (5) be revised ... at least every fifteen years") is also misguided. Reliance on an outdated forest plan and then claiming that the decision can be deferred to a forest planning process to conclude at an uncertain time places these lands in limbo where the FS is free to alter their intrinsic value without analysis. The effects of logging cannot, as a practical matter, be reversed any time soon. Instead it will take decades for the areas to return to their prior values. In addition, the EA fails to adequately analyze and disclose adverse impacts that cannot be avoided by logging these areas. Plainly, the analysis given unroaded areas is not sufficient.

# SENSITIVE SPECIES

Populations of the species listed as Sensitive that occur on the BDNF are already declining or at risk. The Forest Service Manual obligates Forest Supervisors to "[d]etermine distribution, status, and trend of ... sensitive species and their habitats on Forest lands," see Forest Service Manual (FSM) 2670.45(4), and to document possible impacts to sensitive species of an activity in a

"biological evaluation." FSM 2672.4, 2672.41, 2672.42. The FS itself has identified the obligation to determine the impact of logging on Sensitive Species - it uses BEs, has a Sensitive Species list, and has regulations specifically focusing on the special emphasis required for TES species (e.g. see FSM 2672.1) According to the FS Manual, Section 2670.22 on Sensitive Species, the FS must:

- 1. Develop and implement management practices to ensure that species do not become threatened or endangered because of Forest Service actions.
- 2. Maintain viable populations of all native and desired nonnative wildlife, fish, and plant species in habitats distributed throughout their geographic range on National Forest System lands.
- 3. Develop and implement management objectives for populations and/or habitat of sensitive species.

The EA reveals no baseline or quantitative population data for the Sensitive species or their habitats. The agency has failed to obtain or maintain any past or current hard population or inventory or monitoring data for the Sensitive species at issue in the project area or for the BNF as a whole. Distribution, status and population trends have not been determined. FSM 2670.45. Viability cannot be assured without first establishing population objectives. FSM 2670.22(3) and 2672.1 and 32. These objectives have not been established. 36 CFR 219.12(d), 219.27(a)(5 & 6).

In response to USDA Regulation 9500-4 and NFMA's viability provisions, the Forest Service Manual outlines the need to design and implement <u>conservation strategies</u> for Sensitive and other species for which viability is a concern. The Forest Service Manual at FSM 2621.2 states:

To preclude trends toward endangerment that would result in the need for Federal listing, units must develop conservation strategies for those sensitive species whose continued existence may be negatively affected by the forest plan or a proposed project.

Since the BNF does not meet species viability requirements, it is critical for the BDNF to take steps to develop a multiple species conservation strategy. The limited analysis of the proposed logging on Sensitive species was too superficial and inadequate to support the EA's determinations of maintaining species viability. The EA does not contain enough data or analyses to support such conclusions. In the absence of specific population/inventory data and population trend analyses of Sensitive species, summary conclusions of maintaining species viability are not based on a hard look or all the relevant information and are necessarily unreasonable. Compliance with the biological and procedural requirements of Sensitive species is not ensured - see FSM 2670.46. Neither this ROD nor the Forest Plan are consistent with NFMA or NEPA.

A big problem with the EA's analyses is that discussions regarding the <u>connection</u> between the areas designated for old-growth management and habitat needs for Sensitive and other old-growth species such as the northern goshawk, fisher, black-backed woodpecker, and pine marten, i.e. how these areas contribute to population viability, is missing. Effects of cumulative habitat fragmentation from fire, roads, logging, private land developments, livestock grazing, motorized access, etc. is missing. The issue of fragmentation should have been more thoroughly

considered with respect to interior forest species. It is documented that edge effects occur 10-30 meters into a forest tract (Wilcove et al., 1986). Other edge-adapted species may compete with and displace interior forest species if adequate amounts of forest interior habitat are not provided.

#### **Boreal Toad**

The EA does not consider cumulative effects on upland habitat for boreal toads. This does not make sense, since such small populations that are likely to persist are especially susceptible to fragmentation and extirpation due to isolation of smaller populations. See Maxell, 2000. In fact, the EA has no real analysis of cumulative impacts on boreal toads at all. The EA says on page 35 that the project "May impact individuals or habitat, but will not likely contribute to a trends toward federal listing or loss of viability to the population or species.

# **Management Indicator Species**

The Forest Service's failure to ensure the viability of management indicator and sagebrush associated wildlife species violates NFMA and NEPA.

The 1982 NFMA planning regulations require that a forest plan contain provisions to accomplish the following:

Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area. For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area. In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.

Page 16 of the DN states wolverines will not be impacted and sage-grouse will be benefited. No sage-grouse or wolverines were found in the project area. This is an arbitrary statement and in violation of NEPA, NFMA and the APA. Wolverines are a MIS for the revised forest plan but no surveys were done in the project area but two wolverines were harvested in the nearby Fleecer project area in the late 2000s and wolverine tracks were seen in the project area by MT FWP. Figure 21 on page 106 of the Fleecer EA shows the project area as primary wolverine habitat. Ruggierio et al 2000;

Wolverines generally scavenge for ungulates along valley bottoms and forage and den in remote, high-elevation areas (Hornocker and Hash 1981; Morgan and Copeland 1998). Thus if mangers wished to provide habitat for wolverines, they could pay particular attention in the planning process to ungulates winter range and other aspects of habitat quality for ungulates to provide a consistent supply of carcasses for wolverine to scavenge. In addition, wolverines generally avoid areas of human activity. To limit the threat of human-caused disturbance or mortality, managers

could restrict access to portions of the landscape where wolverines are most likely to occur.

In order to meet this viability mandate, the 1982 NFMA planning regulations require that the Forest Service select "management indicator species" whose "population changes are believed to indicate the effects of management activities." 36 C.F.R. § 219.19 (1) (2000). 253.

The 1982 NFMA planning regulations require the Forest Service to monitor the population trends of these species and to state and evaluate land management alternatives "in terms of both amount and quality of habitat and of animal population trends of the management indicator species." 36 C.F.R. § 219.19 (2),(6) (2000).

Wolverines and sage-grouse are two of the MIS chosen for the Revised Forest Plan and project area.

The Forest Service does not know the population of wolverines or sage-grouse on the Forest.

There is no requirement in the Revised Forest Plan to monitor sage-grouse or wolverine population trends in response to management activities, in violation of the 1982 NFMA planning regulations.

The agency's reliance on the wolverine and sage-grouse to indicate effects of management actions in the Forest in general is arbitrary because the agency has no idea what the baseline population is nor does the agency intend to monitor populations after activities are implemented.

The wolverine was recently determined to be warranted for listing under the ESA. 75 Fed. Reg.78030 (Dec. 14, 2010). It is currently a candidate species, waiting for work to be completed on other species before it is officially listed. The USFWS found that "[s]ources of human disturbance to wolverines include . . . road corridors, and extractive industry such as logging . . . ." .The Forest Service admits that the wolverine and/or its habitat are present within the project area and would be impacted by the project. The Forest Service must go through ESA consultation for the wolverine for this project.

The 1982 NFMA planning regulations, which were used to promulgate the Revised Forest Plan require the Forest Service to monitor the population trends of management indicator species and to state and evaluate land management alternatives "in terms of both amount and quality of habitat and of animal population trends of the management indicator species." 36 C.F.R. § 219.19 (2),(6) (2000).

The Revised Forest Plan does not include a requirement to monitor population trends of wolverines or sage-grouse in violation of NFMA, NEPA and the APA.

The "habitat proxy" standards for maintaining wolverine viability are the same as the habitat proxy standards for elk, discussed below.

There was no analysis of the impacts of the Trapper Creek project on wolverines or sage-grouse in violation of NEPA, NFMA, the APA and the ESA. The habitat as proxy approach is premised upon the assumption that, by taking care of habitat needs of the MIS, the Forest Service can ensure the viability of all species. This theory has a rational basis and should work where, as here, the habitat model underlying the old growth standards and the method for measuring habitat are reasonably reliable. Nonetheless, the ultimate test for whether the habitat as proxy approach is permissible is "whether it reasonably ensures that the proxy results mirror reality."

See Gifford Pinchot Task Force v. United States Fish & Wildlife Serv., 378 F.3d 1059, 1066 (9<sup>th</sup> Cir. 2004) (quoting *Idaho Sporting Cong., Inc. v. Rittenhouse*, 305 F.3d at 972-73). Here, the most compelling evidence suggests that the theory, applied in this Project Area, does not match reality. The lack of species sightings, otherwise ignored and unexplained by the Forest Service, undermines the assumption that by taking care of habitat, the BDNF can ensure species viability.

The Forest Plan requires that the Forest Service ensures the existence of viable population of species, not the theoretical possibility that the species should be present. Moreover, without any indication that there are viable populations of MIS in the Project Area before the Project, it is unclear how the Forest Service could conclude that viable populations of MIS will be maintained after the Project.

Put another way, there is evidence in the record that effectively rebuts the presumption that the habitat-as proxy-approach is taking care of the species viability in the Project Area. The Forest Service has failed to adequately address or explain this evidence or describe more adequately the potential reasons why the MIS have not been located in the Project Area. Hence, the Forest Service has failed to consider an important aspect of the problem, offered an explanation that runs counter to the evidence, and relied upon a theory that, as applied, is so implausible that it cannot be ascribed to a difference in view or the product of agency expertise.

Accordingly, the decision to rely exclusively upon the old growth standards to meet the Forest Plan requirements for MIS monitoring and ensuring species viability in the Project Area was in error and the decision authorizing the Project must be set aside, because the Project's effect on species viability has not been addressed.

This analysis is consistent with the Ninth Circuit's recent decision in *Native Ecosystems Council v. Tidwell*, 599 F.3d 926, 935 (9th Cir. 2010) (holding nonexistent MIS cannot serve as proxy). Or is this case there are no MIS in the revised Forest Plan that serve as a proxy. In *Tidwell*, a Ninth Circuit panel reversed a Montana district court decision upholding the Forest Service's use of a proxy-on-proxy approach to species viability requirements. The Ninth Circuit held that the proxy-on-proxy approach was not reliable, because the MIS used to determine appropriate habitat, the sage grouse, did not exist in

the area being analyzed and there was evidence in the record suggesting that the sage grouse population in the larger geographic area was trending downward. On that record, the Ninth Circuit said "[i]t is unfathomable how the Forest Service could meet its responsibility to maintain existing species by selecting as a proxy a species that is virtually non-existent in the targeted area.".

#### Elk

Elk are one of the MIS chosen for the Revised Forest Plan and project area. 262

There is no requirement in the Revised Forest Plan to monitor elk population trends in response to management activities, in violation of the 1982 NFMA planning regulations.

The 1982 NFMA planning regulations, which were used to promulgate the Revised Forest Plan, require the Forest Service to monitor the population trends of management indicator species and to state and evaluate land management alternatives "in terms of both amount and quality of habitat and of animal population trends of the management indicator species." 36 C.F.R. § 219.19 (2),(6) (2000).

The Revised Forest Plan does not include a requirement to monitor population trends of elk.

The Revised Forest Plan does not have a single binding legal standard that limits the percentage of elk cover that can be logged, i.e. there is no hiding cover, thermal cover, or canopy cover retention standard.

The Revised Forest Plan does not prohibit motorized recreation and logging activities in elk winter range. The revised Forest Plan and this project are in violation of NEPA, NFMA, and the APA.

The Revised Forest Plan sets two "habitat proxy" standards for elk in the project area by (1) setting a maximum open motorized road and trail density of 2.0 mi/sq. mi. in the Upper Clark Fork Landscape year-round, except during the five week fall rifle hunting season, and by (2) setting a maximum open motorized road and trail density goal for Hunting District 215 at 1.5 mi/sq mi during the five week fall rifle hunting season.

# GRIZZLY BEAR: NEPA, NFMA, AND ESA VIOLATIONS.

There is no mention of grizzly bears in the DN. Page 93 of the Fleecer EA explains that grizzly bears have been all around the project area and within close proximity but claims none have established a home range in the project area.

The U.S. Court of Appeals for the Ninth Circuit hold that "[o]nce an agency is aware that an endangered species may be present in the area of its proposed action, the ESA requires it to prepare a biological assessment . . . ." *Thomas v. Peterson*, 753 F. 2d 754, 763 (9hCir. 1985). If the biological assessment concludes that the proposed action "may affect" but will "not adversely affect" a threatened or endangered species, the action agency must consult informally with the appropriate expert agency. 50 C.F.R. §§ 402.14 (b)(1),402.12(k)(1).

The area is now known grizzly bear habitat and it is a violation of NEPA to not disclose this. It is also a violation of NFMA to not ensure a viable population of grizzly bears in the project area and is a violation of the ESA to not formally consult with the US FWS to see if this project will adversely affect grizzly bears.

The Fleecer EA admits on page 23 that no specific Forest Plan direction for managing grizzly bears or habitat in this landscape. The agencies did not conduct a biological assessment for the Revised Forest Plan, nor did they complete a Biological Opinion and Incidental Take Statement for the Revised Forest Plan for the grizzly bear.

Indeed, the only enforceable standard for grizzly bears in the Revised Forest Plan is "Standard 6: The Grizzly Bear Amendment applies to only the Beaverhead-portion of the BDNF and is incorporated as Appendix G (USDA 2006b)."

The "Grizzly Bear Amendment" was promulgated with the express intention that it would be implemented when grizzly bears were delisted from the ESA in the GreaterYellowstone Area.

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As noted above, the delisting of those bears was reversed by court order on Sept. 21,2009. In particular, in *Servheen*, the court found that the agencies' reliance on the "Grizzly Bear Amendment" as its sole enforceable regulatory mechanism was arbitrary and illegal because the Amendment offers no binding legal protections for grizzly bears outside the Yellowstone Grizzly Bear Recovery Zone or "Primary Conservation Area."

Thus, the "Grizzly Bear Amendment" has already been established by court order to be legally inadequate for the threatened grizzly bears found within the Beaverhead-Deerlodge National Forest.

Moreover, the Revised Forest Plan has no binding legal standards to protect grizzly bear habitat for grizzlies in the Forest that live outside of the "Primary Conservation Area" or "Recovery Zone."

The Forest Service's failure to consult with USFWS regarding the impacts of the Revised Forest Plan on threatened grizzly bears violates the ESA.

If the biological assessment concludes that the proposed action "may affect" but will "not adversely affect" a threatened or endangered species, the action agency must consult

informally with the appropriate expert agency. 50 C.F.R. §§ 402.14 (b)(1), 402.12(k)(1).If the action "is likely to adversely affect" a listed species, the action agency must formally consult with the expert agency, and the expert agency must provide the action agency with a Biological Opinion explaining how the proposed action will affect the species or its habitat. 16 U.S.C. § 1536(a-c); 50 C.F.R. § 402.14.

If the Biological Opinion concludes that the proposed action will jeopardize the continued existence of a listed species, it must outline "reasonable and prudent alternatives," if any are available, that would allow an action agency to carry out the purpose of its proposed activity without jeopardizing the existence of listed species. 16 U.S.C. § 1536(b)(3)(A).

If the Biological Opinion concludes that the action will not result in jeopardy but may incidentally "take" or "harm" a protected species, the expert agency has authority to provide the action agency with an "incidental take statement." This statement must specify the impact of such incidental taking on the species, set forth "reasonable and prudent measures" that the expert agency considers necessary to minimize such impact, and include the "terms and conditions" that the action agency must comply with to implement those measures. 16 U.S.C. § 1536(b)(4). If the action agency adopts such measures and implements their terms and conditions, the resulting level of incidental take authorized in the incidental take statement is excepted from the ESA's ban on take. During this assessment process, the agencies must use the best available science.

As defined in the ESA's regulations, an "action" subject to consultation includes all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. Examples include, but are not limited to: (a) actions intended to conserve listed species or their habitat; (b) the promulgation of regulations; (c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) actions directly or indirectly causing modifications to the land, water, or air. 50 C.F.R. § 402.02.

# CANADA LYNX: NEPA, NFMA, AND ESA VIOLATIONS.

The Beaverhead NF is home to the Canada lynx, in recent years added to the Endangered Species list as a Threatened species. Lynx are not mentioned in the project area. The U.S. District Court ruled last year that the FWS has to reconsider the BDNF as critical habitat for lynx. Therefore, before this project can go forward, the F.S. must formally consult with the USFWS on the effect of this project on lynx and conference to see if the project will adversely modify lynx habitat. By definition the clearcutting in this project will adversely modify lynx habitat. To say otherwise is arbitrary.

The U.S. Court of Appeals for the Ninth Circuit hold that "[o]nce an agency is aware that an endangered species may be present in the area of its proposed action, the ESA requires it to prepare a biological assessment . . . ." *Thomas v. Peterson*, 753 F. 2d 754, 763 (9thCir. 1985). If the biological assessment concludes that the proposed action "may

affect" but will "not adversely affect" a threatened or endangered species, the action agency must consult informally with the appropriate expert agency. 50 C.F.R. §§ 402.14 (b)(1),402.12(k)(1).

Canada lynx are listed under the ESA.

Canada lynx may be present in the project area and the proposed project may affect lynx by removing vegetative cover, and engaging in mechanized activities that could displace lynx.

The Forest Service did not complete a biological assessment for lynx nor did it consult with USFWS regarding the project's potential impacts on lynx. The Forest Service's failure to complete a biological assessment and consult with USFWS violates the ESA.

The Forest Service's failure to consult with USFWS regarding the impacts of the Revised Forest Plan on threatened Canada lynx violates the ESA.

The Trapper Creek project is in violation of the ESA and an internal Forest Service memo according to Jim Claar from the Regional Office in Missoula. Mr. Claar told Arlene Montgomery from Friends of the Wild Swan, one of our member groups in a phone conversation that the Forest Service is directed to follow the Northern Rockies lynx management direction in historic lynx habitat. The project area is historic lynx habitat which means it is suitable habitat.

In December 1999, the Forest Service and Bureau of Land Management completed their "Biological Assessment Of The Effects Of National Forest Land And Resource Management Plans And Bureau Of Land Management Land Use Plans On Canada Lynx" ("Programmatic BA"). The Programmatic BA concluded that the current programmatic land management plans "may affect, and are likely to adversely affect, the subject population of Canada lynx." The BA team recommended amending or revising Forest Plans to incorporate conservation measures that would reduce or eliminate the identified adverse effects to lynx. The Programmatic BA's determination means that Beaverhead Forest Plan implementation is a "taking" of lynx.

The fact that continued implementation of the Forest Plans constitutes a "taking" of the lynx is not disclosed in the EA or in the EA's Biological Assessment. Such taking can only be authorized with an incidental take statement, issued as part of a Biological Opinion (B.O.) during a Section 7 consultation. The FS must incorporate terms and conditions from a programmatic B.O. into a Forest Plan amendment or revision before projects affecting lynx habitat, such as the Trapper Creek Project, can be authorized.

The Programmatic BA's "likely to adversely affect" conclusion was based upon the following rationale (p. 4), all of which apply here. Forest Plans within the Northern Rockies:

 generally direct an aggressive fire suppression strategy within developmental land allocations. ...this strategy may be contributing to a risk of adversely affecting the Lynx by limiting the availability of foraging habitat within these areas.

- allow levels of human access via forest roads that may present a risk of incidental trapping or shooting of Lynx or access by other competing carnivores. The risk of road-related adverse effects is primarily a winter season issue.
- are weak in providing guidance for new or existing recreation developments.
   Therefore, these activities may contribute to a risk of adverse effects to lynx.
- allow both mechanized and non-mechanized recreation that may contribute to a risk
  of adverse effects to lynx. The potential effects occur by allowing compacted snow
  trails and plowed roads which may facilitate the movements of lynx competitors and
  predators.
- provide weak direction for maintaining habitat connectivity within naturally or artificially fragmented landscapes. Plans within all geographic areas lack direction for coordinating construction of highways and other movement barriers with other responsible agencies. These factors may be contributing to a risk of adverse effects to lynx.
- fail to provide direction for monitoring of lynx, snowshoe hares, and their habitats. While failure to monitor does not directly result in adverse effects, it makes the detection and assessment of adverse effects from other management activities difficult or impossible to attain.
- forest management has resulted in a reduction of the area in which natural ecological processes were historically allowed to operate, thereby increasing the area potentially affected by known risk factors to lynx. The Plans have continued this trend. The Plans have also continued the process of fragmenting habitat and reducing its quality and quantity. Consequently, plans may risk adversely affecting lynx by potentially contributing to a reduction in the geographic range of the species.
- The BA team recommends amending or revising the Plans to incorporate
  conservation measures that would reduce or eliminate the identified adverse effects to
  lynx. The programmatic conservation measures listed in the Canada Lynx
  Conservation Assessment and Strategy (LCAS) should be considered in this regard,
  once finalized.

The BA notes that the LCAS identifies the following risk factors to lynx in this geographic area:

- Timber harvest and precommercial thinning that reduce denning or foraging habitat or converts habitat to less desirable tree species;
- Fire exclusion that changes the vegetation mosaic maintained by natural disturbance processes;
- Grazing by domestic livestock that reduces forage for lynx prey;
- Roads and winter recreation trails that facilitate access to historical lynx habitat by competitors;
- Legal and incidental trapping and shooting;
- Being hit by vehicles;

• Obstructions to lynx movements such as highways and private land development;

It is clear, then, that the FS must do more than follow its Forest Plans to protect lynx. Nonetheless, and in spite of the inadequate analysis population viability following adverse modification of habitat perpetuated by the Project, the Trapper Creek Project BA concludes that the implementation of the proposed action would result in a determination of "may affect but not likely to adversely affect."

The EA and BA fail to fully demonstrate Project consistency with all LCAS Standards and guidelines. For example, the LCAS sets mandatory Standards that would modify or amend the Forest Plans—steps the BNF has thus far not accomplished. Important Programmatic Standards include:

Identify key linkage areas that may be important in providing landscape connectivity within and between geographic areas, across all ownerships. (p. 87)

Develop and implement a plan to protect key linkage areas on federal lands from activities that would create barriers to movement. Barriers could result from an accumulation of incremental projects, as opposed to any one project. (Id.)

Map and monitor the location and intensity of snow compacting activities that coincide with Lynx habitat, to facilitate future evaluation of effects on Lynx as information becomes available. (p. 82)

On federal lands in Lynx habitat, allow no net increase in groomed or designated over-the-snow routes and snowmobile play areas by LAU.

The EA discloses use by motorized recreationalists in the Project area. But the EA provides an incomplete analysis of the impacts of the current level of use of the Project area for motorized recreationalists. The EA and BA fail to disclose the expected level of cumulative impacts on Lynx from the new roads and skid trails/logging access routes to be constructed—access that could be used by snowmobilers, snowshoers, and cross country skiers long after the logging activities have stopped. These roads can also impact lynx habitat during other seasons because of increased access for humans.

The increased access that will result from this project contradicts LCAS requirements because the new roads will create an increase in over-the-snow routes. The EA and BA fail to provide adequate maps of LAUs and habitat components along with areas of human activity as the LCAS requires, making it impossible for the public and decision maker to understand the impacts of motorized travel, as well as to understand impacts on habitat and connectivity of habitat. The BA lacks a genuine analysis of the full range of cumulative impacts of other activities. The EA and BA also fail to disclose the cumulative effects of livestock grazing on the grazing allotments in the project area.

The Programmatic BA's analysis of the ability of the Forest Plans, as 'amended' by the LCAS, to prevent a "taking" of the lynx is based upon the Forests' meeting management standards. As the Beaverhead NF has not adequately shown that it is in compliance with its old growth

standards, or that it even has valid old growth standards, as detailed elsewhere in this appeal, the project BA and EA are not in compliance with the LCAS.

We also have to question the validity of the percentage habitat standards set by the LCAS itself. The Forest Service would be hard-pressed to find many Lynx Analysis Unit in the Northern Region—heavily logged or otherwise—that already don't meet these percentages. Basically, what these Standards accomplish is to validate the management status quo—the very situation that led to the listing of the lynx under the ESA.

#### TRAPPER CREEK PROJECT VIOLATES NFMA AND THE CLEAN WATER ACT

The Forest Service's approval of the project violates the APA and NEPA because the agency failed to analyze point source discharges in the project area.

The Ninth Circuit Court of Appeals recently ruled that sediment from culverts and ditches on Forest Service roads are a point source pollutant and require a permit a NPDES from the E.P.A. Do you have this permit? Nothing in the EA or DN says you have this permit. The analysis for whether there are such culvert and ditch point sources in the project area must be done before the project is approved so that the public can be engaged and notified of the process. The entire point of NEPA is to do the analysis before the action is approved, not after. A necessary part of NEPA analysis is documenting that the project does not violate federal laws. There is no guarantee that the agency will conduct the necessary analysis on potential point source discharges if the analysis is not included in the EA. In other words, the time for analysis is NOW. A failure to consider this important factor violates the APA and NEPA. The D.N. did not adequately address our questions and comments to this effect in our draft EA comments. It is a violation of NEPA to not conduct this analysis and disclose the results to the public.

The revised Forest Plan for the Beaverhead-Deerlodge National Forest does not have an MIS for streams and fish and is therefore in violation of NFMA. The failure to use westslope cutthroat as an MIS for water quality in the Forest Plan violates NFMA. Without an MIS for water quality there is no way to see if the project will compromise water quality. The Mayfly as an MIS in the revised Forest Plan does not measure the impact of projects on water quality.

The revised Forest Plan at page 39 says that even age management or clearcutting must be consistent with the protection of fish. Since there is not an MIS for streams and fish there is no way to tell if even age management or clearcutting is affecting fish therefore the revised forest plan and this project are also in violation of NFMA and NEPA.

There is the potential for short-term negative effects to westslope cutthroat trout and their habitat, by this logging and road building but it was not analyzed in violation of NEPA, NFMA and the APA. Timber harvesting, log hauling, and temporary road construction will pose little risk to aquatic and riparian habitats due to the location of these activities relative to watershed streams, and the implementation of design features and best management practices.

The Revised Forest Plan forbids logging projects in fish key watersheds unless there is a beneficial impact or no impact.

The project allows logging in a fish key watershed and will increase stream sedimentation in that watershed.

The "aquatic improvements" proposed for the project are not in the fish key watershed and are "optional" according to the Forest Service.

The project violates the Forest Plan fish key watershed protections.

The Revised Forest Plan contains provisions to protect scenic integrity.

The Forest Service admits that multiple logging units will not be in compliance with scenic integrity objectives after logging.

The project violates the Forest Plan scenic integrity protections.

The Clean Water Act (CWA) requires that federal agencies comply with its provisions. The agency must protect water quality and comply with state water quality standards on National Forest system lands. Marble Mountain Audubon Soc. v. Rice, 914 F.2d 179, 182 (9th Cir. 1990); Oregon Natural Resources Council v. U.S. Forest Service, 834 F.2d 842, 848 (9th Cir. 1987); Northwest Indian Cemetery Protective Ass'n v. Peterson, 794 F.2d 688, 697 (9th Cir. 1987); 33 U.S.C. 1323(a) ("Each department, agency, or instrumentality of the executive [branch] . . . shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution"); 16 U.S.C. 1604(g)(3)(E)(iii) (timber may be harvested only where "protection is provided for streams, stream banks shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment"); 36 C.F.R. 219.23(d) ("Forest Planning shall provide for --Compliance with requirements of the CWA, the Safe Drinking Water Act, and all substantive and procedural requirements of Federal, State and local governmental bodies") and 36 C.F.R. 219.27(a)(4) ("All management prescriptions shall . . . Protect streams, stream banks, shorelines, lakes, wetlands and other bodies of water").

# CUMULATIVE EFFECTS OF PAST MANAGEMENT ACTIONS AND RESULTS OF PAST MONITORING NOT ADEQUATELY CONSIDERED – PREPARATION OF AN EIS IS REQUIRED.

The Forest Service's approval of the project violates the APA and NEPA because the cumulative effects analysis was inadequate.

The EA and FONSI did not adequately consider all past and future burning, logging or cutting, grazing, ATV use and other cumulative affects. The Fleecer project decision was recently signed just north of this project but it was not adequately considered. The EA does not discuss how past activities have affected fish and wildlife habitat and species viability. The EA fails to disclose the ramifications these issues have for fish wildlife species' viability. The EA also fails to discuss how past timber harvest, grazing, and fire suppression actions have altered vegetative diversity, fuels and fire risk, and fire behavior—each subjects of much discourse in the EA. These are important cumulative effects analyses and disclosures, without which the EA is unable to discuss clearly on the appropriate landscape scales.

It is vitally important that the results of past project-level and forest plan-level monitoring be incorporated into project-level analysis. As mentioned above, portions of the project area were heavily logged and roaded in previous management actions. The NEPA documents for those projects included monitoring requirements as part of the project. The monitoring information following from those projects would naturally be of prime interest to the public and to the Interdisciplinary Team for Trapper Creek Project. The EA didn't disclose the differential effects of those different projects on all resources of concern. It also failed to comprehensively disclose the results of all monitoring done in the project area as committed to in the NEPA documents of those past projects. Finally, it fails to disclose if there was any proposed monitoring, specified in those past project NEPA documents or the Forest Plan for proposed project area, which the FS has failed to perform or report on due to funding shortfalls or other problems.

The cumulative effects of the proposed action, when combined with the extensive history of timber harvest, grazing, and fire suppression in the project analysis area, create a number of significant environmental impacts that individually and collectively require the preparation of an EIS.

There is no mention of the cost of this project in the EA or DN.

No where can the public determine if this project is economically efficient as required by NEPA, NFMA and the APA.

A June 2007 GAO report to Congress: Federal Timber Sales: Forest Service Could Improve Efficiency of Field-Level Timber Sales Management by maintaining More Detailed Data (GAO-07-764) details the problems with Forest Service Timber sale accounting.

"For example, for fiscal years 1992 through 1997, the Department of Agriculture's Inspector General reported that the Forest Service's accounting data-including data associated with timber sales-were not

reliable. We reported a similar finding in 2001. Further, in 2003 and again in 2006, we reported that the Service does not maintain data on the actual cost of individual work activities, including timber sales, and as a result cannot assess the extent to which these activities yielded accomplishments commensurate with the dollars spent on them." (GAO report p. 2).

The report notes that the Forest "Service recently stopped tracking obligations and expenditures at the forest level, where timber sales are generally carried out, and now tracks them at the national forest level." (GAO p. 3.) The report continues, "Without obligations and expenditure data on individual timber sales, for example, field managers said that they cannot compare actual expenditures on the ground with planned expenditures, identifying potential inefficiencies across sales, or identify resources available to another sale if needed." (GAO p. 3). The report continues by stating without this data at the ranger level field managers cannot compare expenditures across districts to see if spending is occurring as planned. This is a violation of NFMA, NEPA and the forest plan.

In a May 1, 2003 report, GAO-03-503 Forest Service: Little Progress on Performance Accountability Likely Unless Management Addresses Key Challenges sent to Congress and the Honorable Scott McInnis, Chairman of the subcommittee on Forest Health, Barry Hill, Director of Natural Resources and Environment at the General Accounting Office, reported "the Forest Service has not been able to provide to Congress and the public with a clear understanding of what its 30,000 employees accomplish with the approximately \$5 billion it received every year."

In 2006 the GAO reported the Forest Service does not have a system to determine the cost of activities below the program level resulting in a focus on budget management without a focus on cost management (GAO 2007, pp. 10-11).

Please perform a complete cost benefit estimate as required by NFMA and NEPA and the Forest Plan. These laws require the Forest Service prior to project implementation to access for potential physical, biological, aesthetic, cultural, engineering, and economic impacts and for consistency with multiple uses planned for the general area based on the best available science. NFMA and the Forest Plan require accurate documentation of costs associated with carrying out the planned management prescriptions as compared with costs estimated in the forest plan. The GAO reports state this is not being done. We have attached copies of the GAO reports.

#### Weeds

Native plants are the foundation upon which the ecosystems of the Forest are built, providing forage and shelter for all native wildlife, bird and insect species, supporting the natural processes of the landscape, and providing the context within which the public find recreational and spiritual opportunities. All these uses or values of land are hindered or lost by conversion of native vegetation to invasive and noxious plants. The ecological threats posed by noxious weed infestations are so great that a former chief of the Forest Service called the invasion of noxious weeds "devastating" and a "biological disaster." Despite implementation of Forest Service "best management practices" (BMPs), noxious weed infestation on the Forest is getting worse and noxious weeds will likely overtake native plant populations if introduced into areas that are not yet infested. The Forest Service has recognized that the effects of noxious weed invasions may be irreversible. Even if weeds are eliminated with herbicide treatment, they may be replaced by other weeds, not by native plant species.

Invasive plant species, also called noxious weeds, are one of the greatest modern threats to biodiversity on earth. Noxious weeds cause harm because they displace native plants, resulting in a loss of diversity and a change in the structure of a plant community. By removing native vegetative cover, invasive plants like knapweed may increase sediment yield and surface runoff in an ecosystem. As well knapweed may alter organic matter distribution and nutrient through a greater ability to uptake phosphorus over some native species in grasslands. Weed colonization can alter fire behavior by increasing flammability: for example, cheatgrass, a widespread noxious weed on the Forest, cures early and leads to more frequent burning. Weed colonization can also deplete soil nutrients and change the physical structure of soils.

The Forest Service's own management activities are largely responsible for noxious weed infestations; in particular, logging, prescribed burns, and road construction and use create a risk of weed infestations. The introduction of logging equipment into the Forest creates and exacerbates noxious weed infestations. The removal of trees through logging can also facilitate the establishment of noxious weed infestations because of soil disturbance and the reduction of canopy closure. In general, noxious weeds occur in old clearcuts and forest openings, but are rare in mature and old growth forests. Roads are often the first place new invader weeds are introduced. Vehicle traffic and soil disturbances from road construction and maintenance create ideal establishment conditions for weeds. Roads also provide obvious dispersal corridors. Roadsides throughout the project area are infested with noxious weeds. Once established along roadsides, invasive plants will likely spread into adjacent grasslands and forest openings.

Prescribed burning activities within the analysis area would likely cumulatively contribute to increases to noxious weed distribution and populations. As a disturbance process, fire has the potential to greatly exacerbate infestations of certain noxious weed species, depending on burn severity and habitat type (Fire Effects Information System 2004). Soil disturbance, such as that resulting from low and moderate burn severities from prescribed fire and fire suppression related disturbances (dozer lines, drop spots, etc.), provide optimum conditions for noxious weed invasion. Dry site vegetation types and road corridors are extremely vulnerable, especially where recent ground disturbance (timber management, road construction) has occurred. Units proposed for burning within project area may have closed forest service access roads (jammers) located within units. These units have the highest potential for noxious weed infestation and exacerbation through fire activities. The Trapper Creek project did not provide an alternative that eliminates units that have noxious weeds present on roads within units from fire management proposals in violation of NFMA and NEPA.

The EA did not address the ecological, social and ascetic impact of current noxious weed infestations within the project area. Include an analysis of the impact of the actions proposed by this project on the long and short term spread of current and new noxious weed infestations. What treatment methods will be used to address growing noxious weed problems? What noxious weeds are currently and historically found within the project area? Please include a map of current noxious weed infestations which includes knapweed, Saint Johnswort, cheat grass, bull thistle, Canada thistle, hawkweed, hound's-

tongue, oxeye daisy and all other Category 1, Category 2 and Category 3 weeds classified as noxious in the MONTANA COUNTY NOXIOUS WEED LIST. State-listed Category 2 noxious weed species yellow and orange hawkweeds are recently established (within the last 5 to 10 years) in Montana and are rapidly expanding in established areas. They can invade undisturbed areas where native plant communities are intact. These species can persist in shaded conditions and often grow underneath shrubs making eradication very difficult. Their stoloniferous (growing at the surface or below ground) habit can create dense mats that can persist and spread to densities of 3500 plants per square mile (Thomas and Dale 1975). The EA does not adequately address the issue of weeds in violation of NFMA and NEPA and the Forest Plan.

The EA does not adequately address the cumulative, direct and indirect effects of the proposed project on weed introduction, spread and persistence that includes how weed infestations have been and will be influenced by the following management actions: road construction including new permanent and temporary roads, and skid trails proposed within this project; opening and decommissioning of roads represented on forest service maps; ground disturbance and traffic on forest service template roads, mining access routes, and private roads; removal of and prescribed burns. The EA does not adequately discuss what open and gated Forest Service roads within the project area have existent noxious weed populations and what methods will be used to assure that noxious weeds are not spread into the proposed action units.

Noxious weeds are not eradicated with single herbicide treatments. A onetime application may kill an individual plant but dormant seeds in the ground can still sprout after herbicide treatment. Thus, herbicides must be used on consistent, repetitive schedules to be effective.

The EA does not commitment to a long-term, consistent strategy of application is being proposed for each weed infested area within the proposed action area in violation of NEPA and NFMA. The EA does not discuss what long term monitoring of weed populations is proposed.

When areas treated with herbicides are reseeded on national forest land, they are usually reseeded with exotic grasses, not native plant species. The EA does not discuss what native plant restoration activities will be implemented in areas disturbed by the actions proposed in this project. The EA adequately discuss howl disturbed areas including road corridors, skid trails, and burn units are planted or reseeded with native plant species.

The scientific and managerial consensus is that prevention is the most effective way to manage noxious weeds. The Forest Service concedes that preventing the introduction of weeds into uninfested areas is "the most critical component of a weed management program." The Forest Service's national management strategy for noxious weeds also recommends "develop[ing] and implement[ing] forest plan standards . . . . " and recognizes that the cheapest and most effective solution is prevention. The EA does not adequately discuss which units within the project area currently have no noxious weed populations within their boundaries or what minimum standards are in the BDNF National Forest Plan to address noxious weed infestations. The Trapper Creek DN and

FONSI did not include an alternative that includes land management standards that will prevent new weed infestations by addressing the causes of weed infestation. The failure to include preventive standards violates NFMA because the Forest Service is not ensuring the protection of soils and native plant communities. Additionally, the omission of an alternative that includes preventive measures would violate NEPA because the Forest Service failed to consider a reasonable alternative.

The Forest Service is not complying with NFMA's requirement to maintain biodiversity since it has no legal standards that address noxious weeds.

#### Rare Plants

The ESA requires that the Forest Service conserve endangered and threatened species of plants as well as animals. In addition to plants protected under the ESA, the Forest Service identifies species for which population viability is a concern as "sensitive species" designated by the Regional Forester (FSM 2670.44). The response of each of the sensitive plant species to management activity varies by species, and in some cases, is not fully known. Local native vegetation has evolved with and is adapted to the climate, soils, and natural processes such as fire, insect and disease infestations, and windthrow. Any management or lack of management that causes these natural processes to be altered may have impacts on native vegetation, including threatened and sensitive plants. Herbicide application – intended to eradicate invasive plants – also results in a loss of native plant diversity because herbicides kill native plants as well as invasive plants. Although native species have evolved and adapted to natural disturbance such as fire on the landscape, fires primarily occur in mid to late summer season, when annual plants have flowered and set seed. Following fall fires, perennial root-stocks remain underground and plants emerge in the spring. Spring and early summer burns could negatively impact emerging vegetation and destroy annual plant seed. The EA does not adequately examine what threatened, endangered, rare and sensitive plant species and habitat are located within the proposed project area in violation of the ESA, NEPA, the APA and NFMA. The standards used to protect threatened, rare, sensitive and culturally important plant species and their habitats from the management actions proposed in this project are inadequate.

The Trapper Creek EA did not respond to all of the issues we raised in our comments in violation of NEPA and the APA.

#### REMEDY REQUESTED

The analysis and decision-making process supporting the *Trapper Creek Project DN*'s selection of Alternative 2 is inadequate. Appellants have outlined, within this statement of reasons, why the DDN and FONSI are arbitrary, capricious, and illegal.

Objectors request that the EA, and DDN be withdrawn or remanded for the reasons set forth in this Statement of Reasons, and an Environmental Impact Statement be prepared that fully complies with all laws, regulations, and policies if the FS wants to proceed with this Project.

Submitted respectfully for the objectors:

/S/

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And for

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